al Application No PCT/US 03/18724

A. CLASSIFICATION OF SUBJECT MATTER
IPC 7 C10L1/14 C10L10/00 According to International Patent Classification (IPC) or to both national classification and IPC Minimum documentation searched (classification system tollowed by classification symbols) IPC 7 C10L Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal C. DOCUMENTS CONSIDERED TO BE RELEVANT Relevant to claim No. Citation of document, with indication, where appropriate, of the relevant passages WO 99/25793 A (BP OIL INT ; TAYLOR SPENCER 1,3,4, Χ EDWIN (GB)) 27 May 1999 (1999-05-27) 9-14 cited in the application page 8, line 1 - page 10, line 10 X WO 01/079397 A (INFINEUM INTERNAT LTD ; 1,3,4, 9-11,15, FAVA CARLO (GB); JACKSON GRAHAM (GB)) 17,21,22 25 October 2001 (2001-10-25) page 12, line 20 - page 13, line 2; claims 1-4,8-13page 20, line 1 - line 11 page 28, line 24 - page 29, line 10 X US 5 821 202 A (MALIK BHARAT B ET AL) 1,2,8, 13 October 1998 (1998-10-13) 10,12,13 cited in the application column 11, line 20 - column 12, line 60; claims 13,23,27Further documents are listed in the continuation of box C. χ Patent family members are listed in annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance Invention \*E\* earlier document but published on or after the international \*X\* document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone filing date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) 'Y' document of particular relevance; the claimed invention cannot be considered to involve an Inventive step when document is combined with one or more other such docu-"O' document referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. other means document published prior to the international filing date but later than the priority date claimed '&' document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 19/12/2003 12 December 2003 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL – 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 opo nl, Fax: (+31-70) 340-3016

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International Application No
PCT/US 03/18724

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C.(Continu	ation) DOCUMENTS CONSIDERED TO BE RELEVANT  Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Calegory	Change of document, wan indication, where appropriate, of the relevant passages	Helevalit to Claim No.
X	WO 99/25677 A (LUBRIZOL ADIBIS HOLDINGS LTD; MORETON DAVID JOHN (GB)) 27 May 1999 (1999-05-27) cited in the application page 18; claim 14; example 1 page 24, paragraph 27	1,3,4,7, 9,10
X	WO 87/01126 A (LUBRIZOL CORP) 26 February 1987 (1987-02-26) page 17, line 20 - line 25	1,4
A	US 6 017 370 A (ZIEGLER KIM L ET AL) 25 January 2000 (2000-01-25) cited in the application the whole document	15,17-21
A	WO 99/61562 A (INFINEUM UK LTD; INFINEUM USA LP (US)) 2 December 1999 (1999-12-02)  page 33, line 8 - line 16; claims 1-8,11,12,16-18 page 34, line 1 - line 12	1,2, 9-11,15, 17,21,22
A	US 4 234 435 A (DAVIS KIRK E ET AL) 18 November 1980 (1980-11-18) cited in the application column 19, line 53 - line 63; example 40	4,5
A	EP 0 678 568 A (BETZ EUROP INC) 25 October 1995 (1995-10-25) cited in the application the whole document	6
A	EP 0 476 196 A (ETHYL PETROLEUM ADDITIVES LTD) 25 March 1992 (1992-03-25) page 4, line 8 - line 35 page 9, line 31 page 11, line 16 - line 17	1-25
Α	WO 01/062874 A (LUBRIZOL CORP) 30 August 2001 (2001-08-30) cited in the application the whole document	15,17-20

ation on patent family members

International Application No
PCT/US 03/18724

		<del></del>		03/18/24
Patent document cited in search report	Publication date		Patent family member(s)	Publication date
WO 9925793	A 27-05-1999	AT AU AU BG	206744 T 733400 B2 1164199 A 104518 A	15-10-2001 10-05-2001 07-06-1999 30-03-2001
		BR CA	9814151 A 2309061 A1	27-11-2001 27-05-1999
		CN DE	1278856 T 69802003 D1	03-01-2001 15-11-2001
		EP	1029026 A1	23-08-2000
		GB WO	2346154 A ,B 9925793 A1	02-08-2000 27-05-1999
		HU	0004736 A2	28-04-2001
		JP NO	2002506085 T 20002471 A	26-02-2002 05-07-2000
		PL	340304 A1	29-01-2001
		SK	6772000 A3	03-12-2001
		TR US	200001227 T2 6270537 B1	22-01-2001 07-08-2001
	•	US	2001003231 A1	14-06-2001
		ZA 	9809742 A	26 <b>-</b> 04-2000
WO 0179397	A 25-10-2001	AU	5832901 A	30-10-2001
		CA WO	2403793 A1 0179397 A2	25-10-2001 25-10-2001
		EP	1274820 A2	15-01-2003
US 5821202	A 13-10-1998	AU	6362298 A	05-11-1998
		CA DE	2235835 A1 69815752 D1	29-10-1998 31-07-2003
		EP	0877072 A2	11-11-1998
WO 9925677	A 27-05-1999	AU	1047299 A	07-06-1999
		DE DE	69811208 D1 69811208 T2	13-03-2003 27-11-2003
		EP	0954517 A1	10-11-1999
		WO JP	9925677 A1 2001508084 T	27-05-1999 19-06-2001
		US	6200936 B1	13-03-2001
WO 8701126	A 26-02-1987	US	4659338 A	21-04-1987
		US AT	4690687 A 77828 T	01-09-1987 15-07-1992
		ΑT	118528 T	15-03-1995
		ΑŤ	154068 T	15-06-1997 30-11-1989
		AU · AU	591394 B2 6192986 A	10-03-1987
		AU	600058 B2	02-08-1990
		AU BR	8253087 A 8606850 A	31-03-1988 03-11-1987
		CA	1303853 C	23-06-1992
		CN DE	86106817 A ,B 3650239 D1	27-05-1987 23-03-1995
		DE	3650239 T2	08-06-1995
			3650634 D1	10-07-1997
		DE		
		DE	3650634 T2	15-01-1998

nation on patent family members

International Application No
PCT/DS 03/18724

	itent document in search report		Publication date		Patent family member(s)	. <u></u>	Publication date
WO	8701126	Α		DK	66695		12-06-1995
				DK	192587		16-04-1987
			•	EP	0233250		26-08-1987
				EP	0423744		24-04-1991
				EP	0579339		19-01-1994
				ES	2001515		01-06-1988
				FI	871661		15-04-1987
				FI	871707		16-04-1987
				HK IL	36993 79599		23-04-1993 31-01-1991
				IN	79599 167837		29-12-1990
				JP	7088514		27-09-1995
				JP	63500602		03-03-1988
				MX	164983		13-10-1992
				NO	871551		13-04-1987
				NO	952019	A	22-05-1995
				SG	15993		16-04-1993
				WO	8701126		26-02-1987
				ÜS	4804389		14-02-1989
		·		ZA	8606177		25-03-1987
US	6017370	Α	25-01-2000	EP	0989176	A1	29-03-2000
WO	9961562	Α	02-12-1999	AU	4143199		13-12-1999
				CA	2332868		02-12-1999
				DE	69903545		21-11-2002
				DE	69903545		14-08-2003
				MO	9961562		02-12-1999
				EP	1088045		04-04-2001
				JP	2002516382		04-06-2002
	4004405			US	6232277 	D1	15-05-2001
	4234435 	A 	18-11-1980	NONE			
EP	0678568	Α	25-10-1995	US	5621154		15-04-1997
				AT	194379		15-07-2000
				AU	686321		05-02-1998
				AU	1635395		26-10-1995
				CA	2146958		20-10-1995
				DE	69517735		10-08-2000
				DE	69517735		01-03-2001
				EP	0678568		25-10-1995
				ES	2147594		16-09-2000
				PT US	678568 5596130		31-10-2000 21-01-1997
				US	5725611		10-03-1998
				BR	9510186		14-10-1997
				FI	972828		01-07-1997
				JP	10512310		24-11-1998
				NO	972720		02-07-1997
				NZ	301909		25-11-1998
				PL	320942		24-11-1997
				TR	960797		21-10-1996
				WO	9620990		11-07-1996
	0476196	Α	25-03-1992	EP	0476196		25-03-1992
EΡ						20	11 00 1000
ΕP				AU AU	635158 8465091		11-03-1993 26-03-1992

ation on patent family members

PCT/US 03/18724

Patent document cited in search report		Publication date	Patent family member(s)		Publication date	
EP 0476196	A			2051452 A1	21-03-1992	
			DE	69004692 D1	23-12-1993	
			DE	69004692 T2	10-03-1994	
			ES	2060058 T3	16-11-1994	
			JP	4234489 A	24-08-1992	
			US	5944858 A	31-08-1999	
WO 0162874	A	30-08-2001	us Us	6610110 B1	26-08-2003	
			ΑÜ	6654901 A	03-09-2001	
			CA	2399882 A1	30-08-2001	
			ĒΡ	1257620 A2	20-11-2002	
			JP	2003524060 T	12-08-2003	
			WO	0162874 A2	30-08-2001	
			US	2002184814 A1	12-12-2002	